

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Office Action dated July 20, 2010. Reconsideration and allowance of the application in view of the remarks to follow are respectfully requested.

Claims 1-6, 8-14, 18 and 21-24 are pending in the Application. Claims 21- 24 are indicated in the Office Action as withdrawn. Claim 1 is the sole independent claim.

The specification is amended herein to correct a clerical error wherein the International Application number PCT 03/00196 for a prior art document was indicated as an international publication number (WO). This error was inadvertent although clear on its face and is corrected by the amendment to the specification contained herein.

In the Office Action on page 5, numbered paragraph 5, it is indicated that claims 15-20 are canceled. This position is respectfully traversed in that claim 18 is pending and not canceled as indicated in the Office Action.

In the Office Action, claims 1-3 and 18 are rejected under 35 U.S.C. §103(a) over U.S. Patent No. 6,262,833 to Loxley ("Loxley") in view of U.S. Patent No. 4,041,481 to Sato ("Sato") in further view of U.S. Patent Publication No. 2004/0231987 to Sterling ("Sterling"). These rejections are respectfully traversed. It is respectfully submitted that claims 1-6, 8-14, 18 and 21-24 are allowable over Loxley in view of Sato in further view of Sterling for at least the following reasons.

It is undisputed that Loxley and Sterling fail to teach, disclose or suggest (illustrative emphasis provided) "the driving means providing during selection of a picture element, variable voltages to the picture element prior to applying a fixed voltage to the display

device, ... wherein the variable voltages are selected having a mean voltage substantially equal to the fixed voltage that is associated with the electro-optical state of the picture element that corresponds to the desired image grayscale" as for example, recited in claim 1 (see, Office Action, pages 2 and 3, regarding claim 1).

Sato is relied on for showing that which is admitted in the Office Action as missing from Loxley and Sterling, it is respectfully submitted that reliance on Sato is misplaced.

The erase pulses of Sato applied during a time period T_E and the pause pulse applied during time T_P are cited for showing the variable voltages of the claims (see, Office Action, page 3). However, it is respectfully submitted that a simple inspection of Sato, FIGs. 7G-7I makes clear that the variable voltages applied during the erase period T_E and the pause pulse applied during time T_P by Sato and are not variable voltages that correspond to the fixed data voltage.

FIGs. 7G-7I which are cited in the Office Action in rejecting the claims shows the pulses that are applied to FIG. 1 of Sato.

While the Office Action confuses what is data and what is other than data (such as erase pulses and pause pulses), Sato does not and is very clear that "[t]he X-line drivers are provided to supply X-erasing pulses and selecting pulses with pause intervals to the X-line electrodes." (See, Sato, col. 4, lines 11-12.) Sato further makes clear that "[t]he Y-line drivers are provided to supply Y-erasing pulses and data pulses with pause intervals to Y-line electrodes." (See, Sato, col. 4, lines 21-23.) As such, Sato makes very clear distinctions between erasing pulses, pause intervals, selecting pulses and data pulses and as readily appreciated by a person of ordinary skill in the art and as appreciated by Sato,

erase and pause pulses are not data pulses (fixed voltage that is associated with the electro-optical state of the picture element that corresponds to the desired image grayscale in terms of the claims language).

In fact, Sato is directed to applying pulses other than data pulses to minimize a cross effect in the electrophoretic cells of Sato. As stated in Sato, (emphasis added) "[i]t has been discovered according to this invention that the cross effect in an electrophoretic image display is greatly suppressed by supplying the selecting pulses and data pulses after a pause interval during which cells are not supplied with any voltage." (See, Sato, col. 4, lines 37-41.) And yet it is during this time wherein "the cells are not supplied with any voltage", namely the pause interval, which the Office Action on page 3, end of first paragraph, confuses with the corresponding desired image grayscale of the claims.

It is respectfully submitted that Sato makes a clear distinction between data signals and the erase and pause signals, which is ignored by the Office Action since it is the erase and pause signals which the Office Action recites in rejecting the claim language. In fact, in FIGs. 6B and 6C, Sato shows the erase signal and the pause signal respectively, as separate and distinct from the data signal (i.e., electro-optical state of the picture element that corresponds to a desired image grayscale to be set as recited in claim 1) which is shown in FIG. 6D. In describing the FIGs. Sato makes clear that "FIGS. 6A-6E are waveforms showing the relationship, in time, among the erase period signal, the erase signal, the pause signal, the select signal and the date [typo for data as clear from FIG. 6D] signal." (See, Sato, col. 5, lines 36-39.) It is clear that Sato understands a difference between reset signals, pause signals and data signals.

As best as can be understood, it seems that the Office Action takes a position that the erase pulses of Sato correspond to the variable voltages of the claims and that the pause interval of Sato corresponds to the desired image grayscale recited in the claims yet this interpretation is not supportable given the explicit teachings of Sato, nor would a person of ordinary skill in the art interpret Sato in this way.

As clear from Sato, the variable voltages during the T_E erase period are not variable voltages that are selected having a mean voltage substantially equal to the fixed voltage that is supplied in Sato during a time period T_s shown in Sato in FIG. 7I. For example, see FIG. 7G wherein the erase pulses supplied during the erase period T_E precede a fixed voltage of +V supplied during the time period T_s and FIG. 7H wherein the erase pulses supplied during the erase period T_E precede a fixed voltage of +3V (a different fixed voltage than the fixed voltage supplied in FIG. 7G) supplied during the time period T_s . Yet as is clear from Sato, the fixed voltage supplied during the time period T_s changes between FIGs. 7G and 7H (from +V to +3V), yet the erase pulses supplied during the erase period T_E are the same between FIGs. 7G and 7H. In other words, clearly the erase pulses do not have a mean voltage substantially equal to the fixed voltage that corresponds to the desired image grayscale since as the desired image grayscale changes, the erase pulses stay the same.

It is respectfully submitted that the display device of claim 1 is not anticipated or made obvious by the teachings of Loxley in view of Sato in further view of Sterling. For example, Loxley in view of Sato in further view of Sterling does not teach, disclose or suggest, a display device that amongst other patentable elements, comprises (illustrative

emphasis added) "driving means providing during selection of a picture element, variable voltages to the picture element prior to applying a fixed voltage to the display device, the fixed voltage being associated with an electro-optical state of the picture element that corresponds to a desired image grayscale to be set, wherein the variable voltages are selected having a mean voltage substantially equal to the fixed voltage that is associated with the electro-optical state of the picture element that corresponds to the desired image grayscale" as recited in claim 1. In Sato, it is undisputable that the erase pulses supplied during the erase period T_E are not selected based on the fixed voltage supplied during the time period T_s .

Sterling is cited for allegedly showing other elements of the claims and as such, does not cure the deficiencies of Loxley and Sato.

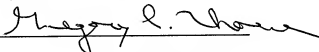
Based on the foregoing, the Applicants respectfully submit that independent claim 1 is patentable over Loxley in view of Sato in further view of Sterling and notice to this effect is earnestly solicited. Claims 2-6, 8-14, 18 and 21-24 respectively depend from claim 1 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support

of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

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October 18, 2010

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